

IN THE CLAIMS

Claim 1 (currently amended): A method for managing temperature of a device which receives variable power for a first and second operation mode, the method comprising:

determining power variance for said first and second operation modes; and

~~delivering~~ determining a compensation power equivalent to said power variance to a heater for increasing temperature of said device, said compensation power is based on a delivery voltage, delivery current and resistance of said heater; and

delivering a corresponding operation mode power; and

combining said compensation power ~~is co-operable~~ with a said corresponding operation mode power for providing approximately equivalent device temperature for each of said first and second operation modes.

Claim 2 (original): The method of Claim 1, wherein said first operation mode is a read mode and said second operation mode is a write mode, and wherein a write mode operation current is greater than a read mode operation current.

Claim 3 (currently amended): A method for managing temperature of a device which receives variable power for a first and second operation mode, the method comprising:

determining power variance for said first and second operation modes; and

delivering a compensation power equivalent to said power variance to a heater for increasing temperature of said device, said compensation power is based on a delivery voltage, delivery current and resistance of said heater;

said compensation power is cooperable with a corresponding operation mode power for providing approximately equivalent device temperature for each of said first and second operation modes; and

~~The method of Claim 1 further including~~ maintaining said delivery voltage at a constant voltage, wherein said delivery current is varied corresponding to a variance in resistance of said heater.

Claim 4 (currently amended): A method for managing temperature of a device which receives variable power for a first and second operation mode, the method comprising:

determining power variance for said first and second operation modes; and

delivering a compensation power equivalent to said power variance to a heater for increasing temperature of said device, said compensation power is based on a delivery voltage, delivery current and resistance of said heater;

said compensation power is cooperable with a corresponding operation mode power for providing approximately equivalent device temperature for each of said first and second operation modes; and

~~The method of Claim 1 further including:~~

determining a resistance of said heater, wherein said heater resistance varies with temperature; and

adjusting said delivery current for maintaining said compensation power based on said determined resistance, wherein said delivery voltage is maintained constant.

Claim 5 (original): The method of Claim 4, wherein said determining a resistance includes sensing a current received at said heater and determining said resistance from said sensed current and said delivery voltage.

Claim 6 (original): The method of Claim 5, wherein said sensing further includes providing a sensed current value which is only a small portion of said current received at said heater.

Claim 7 (original): The method of Claim 1, wherein said heater is provided in a heat transfer relationship with said device.

Claim 8 (original): The method of Claim 1 further including determining heat variance of said device between said first operation mode and said second operation mode.

Claim 9 (original): The method of Claim 1, wherein said device is a magneto-resistive head used for reading and writing information to a magnetic media responsive to respective control currents, wherein a determinable amount of heat is delivered to said head based on said control current and a resistance of said head.

Claims 10-19 (cancelled).